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**Notice of Allowability**

Application No.

10/061,719

Examiner

Binh C. Tat

Applicant(s)

TEIG ET AL.

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 02/08/05.
2. ☒ The allowed claim(s) is/are 1,2 and 4-21.
3. ☒ The drawings filed on 08 February 2005 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 02/08/05
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_



**VUTHE SIEK**  
**PRIMARY EXAMINER**

## **DETAILED ACTION**

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Gregory Shu on 04/02/05.

The application has been amended as follow:

Claim 1 line 12 delete " wherein at least some of the selected candidate sub-networks have a graph structure comprising a first node having a first output outside the graph structure and a second node having a second output outside the graph structure, wherein the first node receives a direct or indirect input from the second node", insert: – wherein the selected candidate sub-networks are formed by circuit elements and at least each of a plurality of the selected candidate sub-networks comprise a first circuit having a first output Boolean function outside the candidate sub-network and a second circuit having a second output Boolean function outside the candidate sub-network, wherein the first circuit receives a direct or indirect input from the second circuit--.

Claim 14 line 16 delete " wherein at least some of the selected candidate sub-networks have a graph structure comprising a first node having a first output outside the graph structure and a second node having a second output outside the graph structure, wherein the first node receives a direct or indirect input from the second node", insert: – wherein the selected candidate

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sub-networks are formed by circuit elements and at least each of a plurality of the selected candidate sub-networks comprise a first circuit having a first output Boolean function outside the candidate sub-network and a second circuit having a second output Boolean function outside the candidate sub-network, wherein the first circuit receives a direct or indirect input from the second circuit--.

### ***Terminal Disclaimer***

2. The terminal disclaimer filed on 10/15/04 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of any patent granted on Application Number 10/062993, 10/062047, 10/062044, 10/061459, and 10/066456 have been reviewed and is accepted. The terminal disclaimer has been recorded.

### ***Reasons for Allowance***

The following is an examiner's statement of reasons for allowance:

3. Claims 1-2, and 4-21 are allowed because the prior art does not teach or suggest a method for performing technology mapping, the method comprising: a) receiving a design that is not bounded to a particular technology; repeatedly; b) selecting from the design a candidate sub-network generating a parameter based on a set of output Boolean functions performed by the selected candidate sub-network based on the parameter; identifying at least one replacement sub-network from a storage structure that stores replacement sub-networks that are bound to the particular technology; and replacing the selected candidate sub-network in the design with the replacement sub-network, wherein the selected candidate sub-networks are formed by circuit elements and at least each of a plurality of the selected candidate sub-networks comprise a first circuit having a first output Boolean function outside the candidate sub-network and a second

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circuit having a second output Boolean function outside the candidate sub-network, wherein the first circuit receives a direct or indirect input from the second circuit.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh C. Tat whose telephone number is (703) 305-4855. The examiner can normally be reached on 7:30 - 4:00 (M-F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mathew Smith can be reached on (703) 308-1323. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tat Binh

Patent Examiner

March 30, 2005



**VUTHE SIEK**  
**PRIMARY EXAMINER**